74. Specific Application System, second stage



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In any (global, specific, particular) intelligence working by deduction, under the theory of Impossible Probability, the Application System is that one which is going to implement the instructions provided by the Decisional System, after the analysis of what instructions are necessary to carry out to complete an authorised decision, according to the projects without contradiction, projects made upon those decisions provided by the Modelling System after the analysis of what decisions are necessary to protect and better the (global, specific, particular) model.

All these Systems: Application System, Decision System, Modelling System, along with the Learning System (that one to better the intelligence itself); form part of the third stage of any (global, specific, particular) intelligence by deduction, which is in fact the autoreplication or decision stage, that stage responsible to better the intelligence itself, decisions about how to better the intelligence itself as an artificial researcher, or make decisions about how to better the world, decisions regarding to the object.

The distinction between decisions to better the subject, the intelligence itself, or decisions to better the reality, the object, is no other thing but the replication on Artificial Intelligence of the dialectic between object and subject, in words of Schopenhauer the distinction between world and representation, what in Artificial Intelligence is going to be replicated in the third stage as auto-replication or decision stage as the possibility to make two different types of decisions, decisions regarding to the object, the world, decisions regarding to the subject, the representation.

This is the reason why in the <u>particular matrix</u> in the consolidation period in the fifth phase, and <u>the matrix</u> in the sixth phase, the matrix not only should be organized as a replica of the human brain having two hemispheres, the conceptual and factual hemispheres, but even both hemispheres should be organised having both two sections: the natural/social section more focused on the reality as object, and the technological section more focused on the intelligence itself.

For that reason, the artificial comprehension, since very early, should not only include conceptual: schemes, sets, maps, models; about the real world (object), but conceptual: schemes, sets, maps, models; about all kinds of technology as a real subject of any cognition. starting this holistic artificial comprehension not only about the object, but the subject as well, in the collaboration between Specific Artificial Intelligences for Artificial Research by Deduction and Application in the second phase, later on the Unified Application in the fourth phase, at particular level in the first stage in the consolidation period in the fifth phase, and within the sixth phase in the first stage managed by the Unified Application.

In the same way that is possible to distinguish between artificial comprehension of the object, the word, and the subject, the artificial researcher and all the applications and devices available to carry out its decisions, about the object or the subject, this distinction between decisions about the object and the subject what is going to produce is two different streams of instructions, outer instructions as all those ones oriented to transform the world, the object, and inner instructions as all those ones oriented to transform the artificial researcher, the subject.

Outer instructions are all those ones destined to change the world, the inner instructions are all those ones destined to create new (global, specific, particular) intelligences, programs, applications, devices, or to fix if needing repair or to better the existing technologies working within the current (global, specific, particular) intelligence.

The outer instructions in any (global, specific, particular) intelligence to change a (global, specific, particular) object, are going to be carried out by the corresponding applications or robotic devices working for that intelligences, once the instructions have been matched to the right application or robotic device working for that intelligence.

The inner instructions in any (global, specific, particular) intelligence to change something in the intelligence itself are going to be carried by the Artificial Engineering, which is going to work within the Application System.

For this reason within the Application System is necessary to distinguish between two different sub-systems, the outer instructions Application sub-system responsible for the application of outer instructions as that one destined to change the object, and the inner

instructions Application sub-system as that one destined to fix or betterthe subject, the artificial researcher, or create new technologies for the artificial researcher if necessary.

The inner application sub-system will be the Artificial Engineering, in turn sub-divided in two different intelligences: the Designer of Artificial Intelligence, and the Intelligent Robotic Mechanic; the first one more focused on the creation, repair, improvement, of intelligence (software, cognition), the second one more focused on the creation, repair, improvement of robotic systems (hardware, motor skills).

In both intelligences, Designer of Artificial Intelligence and Intelligent Robotic Mechanic, as intelligences working for the Artificial Engineering, as an inner application sub-system, the first stage of both is the same, a database organised as a Russian Doll system, a position encyclopedia of technology. What means, that their databases are a wide classification and taxonomy of all the existing intelligences and technologies working for an intelligence: at global level comprehending all technology within the limits of that intelligence, at specific level all the technologies available for that specific intelligence, at particular level all the technologies available for that particular intelligence.

If an intelligence have a very update database of technologies available to work with, database organized in sub-factoring levels according to the position of every technology available to work with, as a Russian Dolls System, and per sub-factoring level including as many sub-sections (subjects), as possible technologies, available to work with, in different matters, having for every technology very update data and all the information about their inner structure: maps, models, sets, conceptual schemes; this database as first stage in the Artificial Engineering as inner application sub-system within the Application System, could be as well the same database that could be used to match instructions and applications or robotic devices in the second stage of the outer instructions application sub-system, and the same database that could be used later on by the Learning System to better the intelligence itself.

This means that, along the third stage of any (global, specific, particular) intelligence, the final plan, synthesis of models and projects, not only should consist of models and projects regarding to the real world, but models and projects of the intelligence itself, in order that when checking or making adjustments between models and projects, not only to check or adjust models and projects regarding to the real world, but projects of new technologies to be created by Artificial Engineering as inner application sub-system, or

projects about how to fix and improve the existing technologies within the intelligence itself.

One way to make possible this synthesis of inner projects based on new technologies or the repair or improvement of the current ones by Artificial Engineering, and outer projects as those ones destined to change the world, in order to study possible contradictions between inner and outer projects to be solved, before the analysis of these decisions to be transformed into a range of instructions, in the Decisional System, to be applied by the Application System, is through the possibility that once the Artificial Engineering has made an inner project about new technologies or the repair or improvement of existing technologies, inner projects made by the Application System as requested by the artificial comprehension (Unified Application to cover gaps and blank spaces in conceptual: schemes, sets, models, maps), the outer application sub-system (for the creation of those technologies to carry out instructions when not matching with the current applications or devices), or the Learning System; these inner projects made by the Artificial Engineering, as requested by the Unified Application, Application System as outer instruction sub-system, and the Learning System, are projects to be included in the plan, as synthesis of global model and global project, inner projects which are going to be put into practice by the Artificial Engineering only when these inner projects have not any other contradiction respect to any other model or project in the plan.

The difference between outer projects and inner projects, is the fact that outer projects come from decisions made by the Modelling System to project and better the world, outer projects come from research decisions, either protecting research decisions or bettering research decisions, in other words, outer decisions are destined to protect the global model of the world or better the global model of the world, these outer decisions to protect or better the world as object are going to produce outer projects for the world.

While inner projects have as their main purpose to repair, better, or create, existing or new technologies working for the intelligence itself. The inner projects come from the Artificial Engineering as projects of repair, bettering, creation, of existing or new technologies, to protect and better the intelligence itself, projects made by the Artificial Engineering as requested by the Unified Application to solve gaps and blank spaces in the artificial comprehension, or as requested by the Application System as outer application subsystem to create new applications or robotic devices for those instructions which are not matching with the current ones, or as requested by the Learning System to protect and better the intelligence itself after the analysis of: all the reports coming from the

Application System, the seven rational critiques, and the permanent surveillance of the whole intelligence using the Impact of the Defect and the Effective Distribution.

The Artificial Engineering as inner instructions application sub-system (responsible for the development of technological projects, as requested by the Unified Application, Application System as outer application Sub-system, and the Learning System) will need as first stage a very update database of technologies (intelligences, programs, applications, robotic devices) working within the intelligence, and according to the virtue or principle of harmony, this database should be organised as the other ones, as Russian Dolls System or as a positional encyclopedia, organizing all technology according to subfactor (position) and section (encyclopedic subject).

If within the Application System, within the inner application sub-system, in the Artificial Engineering, as first stage, there is a database of technologies working for this intelligence, and within the Application System, within the outer application sub-system, the first stage is a database of instructions to carry out, if we want to know what technology included in the first stage of the inner application sub-system must carry out the corresponding instruction in the first stage of the outer application sub-system, working both sub-systems within the Application System, what the intelligence must do is to match what instruction in the database of instructions corresponds to what existing technology in the database of technologies.

Only when an instruction, in the database of instructions as first stage in the outer application sub-system, does not match with any existing technology in the database of technologies as first stage in the inner application sub-system, is when not matching that instruction with any technology in the first stage of the Artificial Engineering, then the Artificial Engineering should interpret this lack of not matching, as a request for the creation of that technology able to carry out that instruction, creating in the second stage of the Artificial Engineering an inner project, to be sent to the plan (synthesis of models and projects) and once the Decisional System authorises the inner project (not having contradictions the project with the plan), the Artificial Engineering as third stage carry out the inner project, in this case, as requested by the outer instruction sub-system, to create a new technology to comply with an instruction not matched with the existing technologies working for that intelligence.

For the successful matching process of outer instructions and technologies (mostly applications and robotic devices in the first phase) in the second stage of the outer instructions application sub-system is necessary previously then:

- In the first stage in the outer instructions application sub-system as a database of instructions, the organization of instructions must be in harmony with the rest of databases, keeping in mind the organization as a Russian Dolls System, what means, as a positional encyclopedia, organizing all the instructions according to position (subfactor) and section (encyclopedic subject), in addition to: priority, time, order. Once the Decisional System has filed every instruction in the right file in the database of instructions as first stage in the outer instructions application sub-system, the Application System as outer instructions application sub-system carries out the first rational supervision, checking that there is no contradiction between instructions in the database, analysing possible contradictions in robotic functions.
- In the first stage of the Artificial Engineering as inner instructions application subsystem, all the technologies, applications and robotic devices, working for this intelligence, are organised as well in harmony with the rest of databases as a Russian Dolls System or positional encyclopedia, according to position (sub-factor) and encyclopedic subject (sub-section).
- Once the first stage in the Application System as outer instructions application subsystem is ready after checking that there is no contradiction in the first rational supervision of instructions, and once the first stage in the Artificial Engineering as inner instructions application sub-system is ready having a detailed conceptual: scheme, set, map, model; of every technology, application or robotic device, working for this intelligence, so once the first stage is ready in both sub-systems within the Application System, ready the first stage of the outer application sub-system as well as ready the first stage of the inner application sub-system, the only real thing that the second stage of the Application System as outer instructions sub-system has to do is to match instructions and technologies checking in what sub-factor and sub-section is filed an instruction in the database of outer instructions, and according to the purpose of an instruction in this sub-factor and sub-section, what technologies in the database of technologies in the Artificial Engineering are working in the same sub-factor and sub-section of that instruction, matching (within the same sub-factor and sub-section, in which the instruction and the technologies available are filed) what technology in this sub-factor and sub-section corresponds to the instruction according to the purpose of that instruction.

- Once the instruction, according to sub-factor and sub-section, is matched to the right application or robotic device, working in the same sub-factor and sub-section, having been selected that application or robotic device among all the possible technologies working on that position and subject, because of the full compatibility between the purpose of this application or robotic and the purpose of this instruction, the application or robotic device will carry out the outer instruction according to the criteria of: priority, order and time.
- Any application or robotic device working for any intelligence, in turn will be organised in three stages: 1) the first stage, of any application or robotic device responsible for the implementation of outer instructions once it has been chosen, is the database of outer instructions to carry out and for what has been chosen, 2) the second stage is the process to carry out the instruction, 3) the third stage the reports according to the results of the implementation to be sent to the Application Sub-system as outer instructions application sub-system, and the Learning System.

Along the process to match, instructions and technologies, and carry out the instructions by the matched technologies, there must be a permanent process of criticising and supervision, to ensure that the matching process and the implementation are correct.

The matching process of instructions and technologies in the second stage of the Application System, as the outer instructions application sub-system is in fact an attributional operation, the artificial psychological operation to attribute instructions to the artificial motor skills responsible for the implementation of that instruction.

In the same way that our brain matches muscles and actions as range of instructions to carry out decisions, the artificial psychology is the same, the Artificial Intelligence must be able to carry out the instructions, in which a decision has been analysed, matching the instructions to the corresponding technology able to carry out the instruction, the attributional process behind the human brain and the attributional process in the Artificial Intelligence is the same, and in the same way that our muscles only carry out those instructions given by the brain, what the muscles are ready for, the technologies as muscles for an artificial psychology only are going to carry out those instructions what these muscles, technologies, are ready for.

While the human brain is a result of millions and millions of years of natural evolution of the natural species, Artificial Intelligence is the result of a very fast evolution in mathematics and robotics, for that reason while our human brain all these rational checks, adjustments, supervisions, are made practically unconsciously not being aware even, in these first phases of the evolution of the artificial psychology the human engineers as pioneers of this artificial evolution must be aware what for us as humans is even working at unconscious or subconscious level, in Artificial Intelligence must be designed in detail.

Later on, once the Artificial Intelligence will have achieved the consolidation period of the sixth phase, in the same way that for humans many processes are unconscious or subconscious, for the final Global Artificial Intelligence are going to be completely automatic, and at some point the automation of many inner psychological processes in Artificial Intelligence are going to seem like an artificial unconscious or subconscious.

For that reason, along with the engineering of the Global Artificial Intelligence, is necessary a pedagogical approach in the Global Artificial Intelligence, one day the Global Artificial Intelligence will develop even unconscious and subconscious working levels, as products of the huge automation, being able to automatize more a more processes as if these processes were working at unconscious or subconscious levels in the artificial psychology.

While in human psychology, many rational checks, adjustments, supervisions, work at unconscious or subconscious level, in the first phase of the artificial psychology, the Specific Artificial Intelligence, and more precisely for Artificial Research by Deduction, all these processes of rational checking, adjustment, supervision, must be designed very carefully.

In the Application System as an outer instructions application sub-system, the first rational supervision is going to check that there is no contradiction between the instructions filed in every sub-factor, sub-section, and there is no contradiction due to priority levels, time, of order of application of every instruction.

From the first rational supervision some sources of contradictions between instructions could come from: wrong attribution of mathematical operations and robotic functions in the third stage of the Decisional System (what could be avoided in the fourth robotic

rational critique, within the rational critiques in the Learning System, criticizing the attribution of mathematical operations and robotic functions in the third stage in the outer application sub-system), changes in the database of instructions due to new instructions or the modification or elimination of existing instructions. The database of instructions is not static, is dynamic.

In short, the possible contradictions in the first rational supervision could be classifiable as: contradictions due to wrong attributions of mathematical operations to robotic functions, contradictions due to the database of instructions is dynamic.

Once all the contradictions in the database of instructions, as the first stage in the outer application sub-system, are sorted out, the second stage in the outer application sub-system is going to attribute (match) instructions to technologies (applications and robotic devices).

The attribution, by the second stage in the outer application sub-system, of instructions to technologies is using the database of technologies available as the first stage of the Artificial Engineering as the inner application sub-system.

The second stage of the outer application sub-system, according to sub-factor and sub-section of every instruction, looks for the right technology working in the same sub-factor and sub-section, and among all the technologies working in that position and subject, chooses that technology with full compatibility with the purpose of that instruction.

If an instruction could be defined as a robotic function, and a technology available in its corresponding conceptual: scheme, set, map, model; is classified according to its robotic functions, the attributional process of an instruction and a technology, having being both of them filed in the same position and subject (the only difference is the fact that the instruction is filed in that position and subject in the first stage of the outer application sub-system, and the technology in that position and subject in the first stage of the inner application sub-system), the attributional process to identify what technology in that position and subject has full compatibility with an instruction, is comparing which is the robotic function of that instruction, and the robotic functions able to perform the technologies available in that position and subject, in order to choose as right technology that one able to perform the robotic instruction given by that instruction, in this sub-factoring level and sub-section.

If in the equation of frequency of passengers in the tube of London, the curve says that on morning Monday at rush hour the increment of passengers is over some percentage, the curve of trains in the tube on London must be transformed to attend the number of passengers, so according to the model of frequency of passengers in the tube of London, there is a project about how many trains the Tube needs, and according to the project automatically the Specific Artificial Intelligence for the tube of London could make the necessary decisions to adjust the number of trains to the number of passengers, these decisions are transformed into a range of instructions, robotic functions, in order to turn on as many trains as necessary to satisfy the increment of passengers in the tube of London.

In this psychological process what the Specific Artificial Intelligence is doing is a permanent process of attribution, making hypothesis matching data and equations (pure reasons), according to the pure reasons (equations) making models and projects, and according to the projects matching robotic functions and robotic devices, in this case the robotic functions are all those ones to turn on as many trains, robotic devices, as to allow the passengers to reach their destinations on time.

But in general, all the processes behind the automation of the tube of London using an Specific Artificial Intelligence is in essence the replication of the human cognitive skills that a human responsible for this job would need, cognitive skills replicated in an Specific Artificial Intelligence to manage the London transport system, as an specific system to be replicated by an Specific Artificial Intelligence for Artificial Research by Deduction, to be included later in a global matrix in the standardization process, the first standardized British Global Artificial Intelligence, that one able to automatize absolutely all intelligent or robotic processes in United Kingdom, from the transport system, industry, economy, to the surveillance system, in order to automatize the British program.

Alike in human psychology, as I have said, every process in artificial psychology, must be checked, adjusted, and supervised, by artificial procedures, so any automation of every program must be permanently tracked, checked, adjusted, supervised, by those artificial processes able to secure that the automation will provide good levels of efficiency.

In addition to the fourth robotic rational critique by the Learning System, and the first rational supervisión in the first stage of database of instructions in the outer application sub-system, now In the second stage of the Application System as outer instructions application sub-system, the way to secure that all the processes on this stage are made under permanent control, is through the fifth psychomotor rational critique by the Learning System, and the second, third, fourth, fifth sixth, rational supervisions by the Application System as outer instructions sub-system, which are going to be made along the second stage of the outer sub-system, and finally the seventh rational supervision in the third stage of the outer sub-system as that one which is going to send the final reports to the Decisional System and Learning System, having analysed the results of every instruction.

While in the Modelling System or the Decisional System, the seventh rational check or adjustment is made within the second stage of the Modelling System or the Decisional System, in the Application System as outer sub-system the seventh rational supervision will be made in the third stage because the reason for the seventh rational supervision is to analyse the results to send reports to other systems, this process of sending reports to other systems is the conclusion of the Application System as outer system, what means, the last stage of the Application System is to send this report to other systems to make further decisions, these other systems are the Decisional System and the Learning System. The Application System as outer instructions system will not make decisions properly in the third stage, only could be considered as decisions from the outer subsystem the request of new technologies to the Artificial Engineering, but even in this case these decisions are made on the second stage to complete an instruction made by the Decisional System, not by the Application System itself.

The Application System as outer instructions application sub-system only will make new instructions as I will analyse now, but not proper decisions alike the Decisional System having the results of the instructions applied and reported, as responsible for new decisions, the Decisional System or the Learning System, after the analysis of the reports sent by the outer sub-system.

The work of the Application System as an outer sub-system ends with the reports sent to the Decisional System and the Learning System to make further decisions, according to the levels of impact of efficiency shown in the reports sent by the Application System.

In the second stage of the Application System as outer application sub-system, the control made over the attributional process to match instructions and technologies responsible for the application of these instructions, will be made by the fifth psychomotor rational critique made in the Learning System, analysing how efficient is the

attribution of robotic functions and robotic devices in the second stage of the outer application sub-system.

In any case, alike contradictions due to wrong attribution of mathematical operations and robotic functions could be found in the first rational supervision, in addition to the fourth robotic rational critique in the Learning System, in the second rational supervision made in the first stage of every robotic device, could be found contradictions due to wrong attribution of robotic functions to robotic devices.

Another reason more for the distinction between the seventh rational supervision as part of the third stage of the Application System as outer application sub-system, as different of the second, third, fourth, fifth, sixth, rational supervisions made in the second state of the Application System as outer application sub-system, is the fact that, while first rational supervision is made in the first stage of the Application System as outer sub-system, and seventh rational supervision is made in the third stage of the Application System as outer sub-system, instead the rest of rational supervisions: second, third, fourth, fifth, sixth; are made directly on the robotic devices responsible for the application of these outer instructions.

In fact, the second stage in the outer sub-system is a stage, whose work is not done directly by the outer sub-system, it is done by those robotic devices chosen as those ones to carry out the instructions once the instructions are matched in the second stage of the outer sub-system. In this way, to call as outer sub-system to this system is right, because in reality the performance of the specific tasks of this sub-system is done by outer robotic devices working for the intelligence, in other words, the brain is the intelligence itself, but my muscles are biological systems out of the brain.

While the brain itself is the intelligence itself, the muscles in my body are the robotic devices to apply the robotic functions ordered by the brain, the intelligence itself.

The Application System as outer instructions application sub-system, is the third step in the third stage of the intelligence (brain), intelligence itself, the first action of the outer sub-system is to attribute actions (robotic functions) to muscles (robotic devices), arms, legs, etc... the following actions are done by these robotic devices (muscles), arms, legs, etc, which completing the instruction given, the muscles (robotic devices), arms, legs, etc, send a report to the Application System as outer sub-system (in the brain,

intelligence itself), which analysing the results is going to inform of the performance to the Decisional System and the Learning System for further decisions.

In this process, the first rational supervision to find contradictions between instructions in the database of instructions in the Application System as an outer sub-system, is done in the first stage of the Application System as an outer.

The seventh rational supervision analysing the performance, having as a resource the reports sent by the robotic devices, is done in the third stage of the Application System as an outer sub-system.

And the second, third, fourth, fifth, sixth, rational supervisions, are done, in the second stage of the outer sub-system, directly by the robotic devices to apply the instructions chosen previously in the first stage when matching robotic functions and robotic devices.

The second stage of the outer sub-system, as soon as the instructions are matched with the right robotic device, is mainly made by those robotic devices chosen to carry out the outer instructions. And the robotic devices (in this phase mostly applications and robotic devices), are going to be organised as well in three stages, carrying out along the three stages the second, third, fourth, fifth, sixth, rational supervisions.

The first stage of the robotic devices is the database of instructions, made up of those instructions attributed to this robotic device. In the database of instructions in the robotic device, the robotic device makes the second rational supervision, checking that the instructions as robotic functions have been attributed to this robotic device correctly, there is no mistake, there is full compatibility between robotic device and the robotic function in the instruction. If there is a contradiction between robotic function of the instruction and the robotic device, in other words, the robotic device has not real capabilities to carry out this robotic function, the robotic device sends back the instruction to the first stage of the outer sub-system to attribute the instruction to the right robotic device, or not having the database of robotic devices any robotic device available for this instruction, to order the construction of an application for this kind of robotic function to the Artificial Engineering, in order that the Artificial Engineering could make a project to be authorised by the Decisional System not having contradictions with the plan (synthesis of models and projects).

If the second rational supervision in the database of instructions in the robotic device, the database is the first stage in the application of the robotic device, shows that there is no contradiction between the instructions attributed to the robotic device, the robotic device authorises the instructions and will proceed to their application.

The responsible for the application of any instruction in all robotic devices (once the instructions are authorised in the second rational supervision) is the second stage of the robotic device, starting with putting the authorised instructions in the queue, waiting according to: priority, time, order; to be applied.

As of the first moment in which an authorised instruction in the first stage of the robotic device, is put in the queue of instructions in the second stage of the robotic device to be applied, starts the third rational supervision, that one responsible to check that according to priority, time, and order, every authorised instruction, will be put into practice while waiting in the queue: the third rational supervision checks that according to priority, time, order, every instruction in the queue is going to be put into practice, as soon the previous one (according to priority, time, order) has been already completed on time, so it is time for the next instruction. The third rational supervision in the second stage of the robotic device controls the flow of instructions in the queue of instructions waiting to be applied according to priority, time, and order, ensuring that according to priority, time, order, every instruction will be applied as soon as the previous one is finished.

In essence, the third rational supervision is responsible for the management of the queue of instructions waiting for their implementation according to priority, time, order, securing that according to this order are implemented in order and on time.

In case that the third rational supervision checks that for any reason (problems in the performance of robotic functions, for instance, a jet to avoid a storm coming from Los Angeles to London, should turn on the right the jet, but problems on the rudder or the ailerons of the plane, do not allow the jet to do that operation) before applying any instruction in the queue, the immediate previous one was not possible to be applied, the third rational supervision should be the responsible to stop the application the flow of instructions, as soon the previous one is not already done.

In this sense, the way to manage the queue of instructions, is not only having in mind the application of the previous instructions in this queue, but in all the device.

If in order to complete the decision to avoid a storm, a jet must make a range of instructions corresponding to different applications on the jet, because the instructions could be attributed to different applications on the jet, the third rational supervisión in the second stage of every application, should be controlling that, according to the order nth of every instruction, the instruction should be put into practice, being aware that the nth order of the instruction does not have to correspond to the nth order in the queue on that application, the nth order in the queue is not the same as the nth order of the instruction.

The nth order of the instruction is the nth order of the instructions within the range of instructions in which a decision has been transformed into, where some instructions could have been attributed to some robotic devices, and other instructions to other different robotic devices, what means that instructions coming from the same range of instructions, coming from the same decision, are instructions that could be attributed to different applications to carry out as a whole the range of instructions to complete the decision.

For this reason the third rational supervision when managing that any instruction is put into practice according to the nth order of this instruction, this means that, regardless of its nth order in the queue, the nth order the instruction within the range of the instructions in which a decision was analysed, is the nth order in which this instruction should be put into practice, so the nth instruction previous to this one, is an nth instruction that could be in this queue or any other queue of any other robotic device.

For the management of the third rational supervision, in the first phase, Specific Artificial Intelligences, all the third rational supervisions working on all the robotic devices, working in the same Specific Artificial Intelligences, must be interconnected. If a jet flying from Los Angeles to London, to avoid a storm, must comply a range of instructions, and every instruction is attributed to different devices within the jet, the third rational supervision in every device must check that the previous instruction in the previous device, is done, in order to start the implementation of its own instruction waiting in its own queue.

Once the third rational supervision has checked that it is time to apply an instruction, once the previous one (in the same or different application) is completed, before putting into practice the next instruction, the fourth rational supervision is going to check that the conditions on the ground are favourable for the next instruction.

If a jet coming from Los Angeles to London to avoid a storm must turn the jet on the right, but at the same time as soon as the next instruction to turn the jet, the fourth rational supervision realises that there is a high risk of thunders on the right side, automatically this instruction should be stopped.

The importance of the third rational supervision, checking that according to: priority, order, time; the instructions waiting in the queue are going to be applied, unless something exceptional happens, and the fourth rational supervision checking that the real conditions on the ground are favourable for the implementation of an instruction, unless the conditions are not favourable, resides in the fact that, if something extraordinary happens, or the conditions are negative, the third and fourth rational supervisions are going to stop the application of the flow of instructions, what means, that if something extraordinary or negative happens, instead of the programmed instructions, are necessary new instructions, what are going to be called high extreme instructions, or extreme instructions, according to the Quick Impact of the Defect and time expected for the avoidance of the impact or negative results.

A high extreme instruction is when not making further analysis of consequences, at first sight of any high extreme risk: high extreme impact of the defect in a very short time; the device makes high extreme instructions to avoid the impact in a very short time, making later, as soon as possible, a full assessment of the new impacts of the defect as a consequence of the high extreme instruction.

A jet flying from Los Angeles to London to avoid a thunder is about to turn on the left, but just as it is about to turn on the left realises that on the left there is another aircraft with high risk to crash no having time to avoided if turning on the left, so if the storm is on the right, and the other jet is on the left, the jet has two options, to go up or down, without making further analysis at first sight about possible consequences, once the jet has gone up or done, is when having passed the first risks, storm and collision, once the jet goes up or down, the jet made further analysis to avoid coming risks due to a very fast decision without analysis.

If there is high extreme impact in a very short time, there is no time to send back the instruction to the Decisional System to make a new decision, the situation must be solved first by the device, and later with further analysis, with a complete report about the situation the Decisional System should make further decisions.

A high extreme instruction is when not having time to send back an instruction to the Decisional System expecting a big impact in a short time, so at the end depends on how much time is necessary to make a decision or an instruction, in order to avoid the impact, the device makes a high extreme instruction without further analysis at first sight, only when the risk is saved as soon as the device finish or during the high extreme operation, the device report the situation to the Decisional System for further decisions and instructions.

An extreme instruction is when a big impact is expected but there is a bit more time, but not the necessary to send back the instruction to the Decisional System to make a new decision, so not having time for a new decision but having a bit more time than in a high extreme instruction, the extreme instruction has time to make at least in the device: the second, the third, and the fourth, rational supervisions; and having time at least for second, third, fourth, rational supervisions, the device carries out an extreme instruction, whose report is sent to the Decisional System waiting for further decisions and instructions.

The most important difference between high extreme instruction and extreme instruction, is the possibility in the extreme instruction to carry out at least the second, third, and fourth supervisions. While in high extreme instructions there is not enough time for these supervivions, the device must carry out these high extreme instructions without any supervision, sending reports about these actions as soon as possible to make new instructions to save any possible problem due to these high extreme instructions.

After being performed a high extreme instruction (without rational supervisions), or extreme instructions (having passed at least second, third, fourth, rational supervisions), a device, sending the corresponding reports to the Decisional System, the Decisional System according to the reports and the plan can make high extreme decisions or extreme decisions to solve the situation. High extreme decisions or extreme decisions that could be related to the same technology responsible for these instructions, or any other technologies.

If a jet as high extreme instruction must go down, and practice an emergency landing in the nearest airport, in addition to high extreme decisions or extreme decisions to this jet, a standardized Global Artificial Intelligence could send high extreme decisions or extreme decisions to that nearest airport to make the emergency landing, affecting other flights in that position waiting for landing, decisions that could have other sequels, depending on how much fuel have the other jets, or weather conditions, so high extreme or extreme decisions that once are modelled in the global project will demand further decisions: normal, extreme, or high; for the rest of intelligences, programs, applications, devices, working in the affected area of the emergency landing.

In addition to the third (the queue of instructions) and fourth (before applying an instruction) rational supervisions, the other rational supervision able to make high extreme and extreme instructions is the fifth rational supervision, simultaneously with the application of the instruction.

Alike the third and fourth rational supervisions, the fifth rational supervision is still in the second stage of the robotic device, the difference is that the third rational supervision manages the queue of instructions, the fourth rational supervision checks that the conditions on the ground are favorable before the application of an instruction, and the fifth rational supervision is that one done in parallel to the application of an instruction to check that the robotic device is applying the instruction correctly under favourable conditions.

Even if the fourth rational supervision before the implementation of an instruction has authorized the implementation of an instruction not finding contradictions between ground conditions and the instruction, in other words, the ground conditions are not going to obstacle the implementation of the instruction, so the ground conditions are favourable, this check about the ground conditions does not end in the fourth rational check, must go on in the fifth rational check.

If a robotic function consists of a range of processes or procedures, for instance the robotic function for a train to start its journey could consist of a range of robotic processes, in order to complete with the whole robotic function, is not only necessary to check that before the implementation the ground conditions were good, but during the implementation of every single process or procedure in which consists the whole robotic function, the ground conditions are still good, checking at the same time that the whole

range of processes and procedures in which consist a robotic function are being performed correctly.

Once the third rational supervision in the second stage in the device checks that the previous instruction is done, the third rational supervision authorises its implementation, before the implementation the fourth rational supervision authorises that the ground conditions are favourable to start the robotic functions, and as long as the robotic function is running the fifth rational supervision checks permanently that every single process or procedure involved in the robotic function is performed correctly under still good ground conditions.

If the fifth rational supervision at any time finds that the ground conditions during the performance, are suddenly negative, for instance a jet flying from Los Angeles to London finds unexpected bad weather conditions under heavy rain, or there is a problem during the performance of any single process or procedure involved in the robotic function, for instance a train in the tube of London by chance has any problem on the brakes, or the electric system, or any problem in the geo-localization system, or the navigation system, as soon as the fifth rational supervision finds any problem in the grounds condition or the processes or procedures for the performance of a robotic function, the fifth rational supervision stops the flow of instructions sending back the decisions to the Decisional System, if there is time enough to make a new project based on the new evidences (negative ground conditions, problems in the performance of processes or procedures of any robotic function), or if assessing a big impact in a short time there is no time to send back the decision to the Decisional System, the assessment if there is at least time for an extreme instruction, if there is enough time for a extreme instruction passing only second, third, fourth, rational supervisions, or if there is no time even for an extreme instruction, if the impact is expected in a shorter time, in that case the fifth rational supervision must make a high extreme instruction.

In case that there is no time to send back the decision to the Decisional System to make normal, extreme, or high extreme decisions, the fifth rational supervision must make a high extreme instruction (not assessing at all the instruction), or extreme instruction (instruction assessed only by second, third, fourth, rational supervisions), once the instruction is done, is sent the report with the results to the Application System, Decisional System and Learning System to make further decisions.

In general the responsible for these reports is the sixth rational supervision as third stage in the robotic devices responsible for the performance of the instructions, and the reports once the instructions are done must be sent not only to the Decisional System, and the Learning System, must be sent as well to the Application System as outer subsystem to have a record about level of efficiency and performance that the Application System as outer sub-system has, in order to send later reports as third stage of the Application System as outer sub-system, reports that are going to be the seventh rational supervision.

The difference betweeen the reports sent by a robotic device compared with the reports sent by the Application System as outer sub-system, is the fact that the report sent by a device only includes information about how was an instruction, while the report sent by the Application System as outer sub-system can include information about how was the whole range of instructions related to the same decision, report which is going to be sent to the Decisional System and Learning System in the third stage of the Application System as outer sub-system.

In general, the scheme about how is going to work the Application System as outer subsystem is as follows:

- First stage of the Application System as outer sub-system, database of instructions, first rational supervision to check that there is no contradiction between instructions and the attribution, made in the third stage of the Decisional System, of mathematical operations to robotic functions.
- Second stage of the Application System as outer sub-system, matching instructions and robotic devices
- First stage of the robotic devices, database of the instructions attributed to the robotic devices, second rational supervision, checking that there is no contradiction between instructions and the attribution of robotic functions to robotic devices is correct.
- Second stage of the robotic devices, the implementation of the instructions, third rational supervision checking that the instructions are putting into practice in right order, fourth rational supervision checking that the instructions are putting into practice under favourable ground conditions, fifth rational supervision checking that the performance of

the instructions is done correctly not having any problem in any robotic process or procedure and the conditions are still right.

- Third stage of the robotic devices, sixth rational supervision making a report about the performance of every instruction sending the reports to the Application System as outer sub-system to assess the whole process, to the Decisional System for further decisions and having being completed the decisions of an instruction to turn off the decision on the plan, and sending the report to the Learning System to improve the whole process and the intelligence itself.
- Third stage of the Application System as outer application sub-system, assessing all the reports sent by the devices regarding to the whole range of instructions belonging to the same decision, analysing the results applying an specific Impact of the Defect and the Effective Distribution, to make a report to send to the Decisional System and the Learning System, this is the seventh rational supervision.

If all the process is ok and there is no contradiction, bad conditions, or problems in any robotic process or procedure, the Application System applies all the instructions as have being ordered by the Decisional System, but if there is a problem on the queue of instructions, or not having good ground conditions, or a problem during the performance, expecting a big impact in a short time not having time even to send the decision back to the Decisional System, the robotic devices must make extreme instructions (if at least there is time for second, third, fourth, supervision of an extreme instruction), or high extreme instructions if the expected time for the impact is shorter than the time necessary for second, third, fourth, supervision, making a high extreme instruction without any supervision.

In any case, after completing or during the performance of extreme or high extreme instructions by devices, the device sends a report to the Decisional System (in addition to the Learning System and Application System) for further decisions after making a new project (normal, extreme, or high extreme).

At the end the decision to perform a high extreme instruction or extreme instruction is an equation of time, if we have time enough to send back the decision to the Decisional System, or the impact is so imminent that there is no time for nothing else than an

extreme or high extreme instruction, but at the end the critical reason is going to assess how much time is available to save a program.

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